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7590 06/18/2004
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EXAMINER

LE, MIRANDA

ART UNIT PAPER NUMBER

2177

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/710,605

Applicant(s)

MCCAW, KELLY ROBERT

Examiner

Miranda Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This communication is responsive to Amendment A, filed 03/22/2004.
2. Claims 1-30 are pending in this application. Claims 1, 11, 21 are independent claims. In the Amendment D, claims 1, 11, 21 have been amended. This action is made Final.

Drawings

The drawings were received on 03/22/2004. These drawings are accepted.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5-8, 11-13, 15-18, 21-23, 25-28, are rejected under 35 U.S.C. 103(a) as being unpatentable over Boothby et al. (US Patent No. 6,044,381), in view of Scott et al. (US Patent No. 5,649,195)

As to claims 1, 11, 21, Boothby teaches:

“a) designating a first database as a source database and a second database as a target database” at col. 2, line 23 to col. 3, line 58, col. 5, line 66 to col. 6, line 29;

“b) determining a state of a first modification flag contained in a first data record in said source database, wherein said first modification flag indicates that said first data record in said

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source database has been modified and wherein a value of said first modification flag, indicative of a particular event, is set upon an occurrence of said particular event” at col. 4, line 59 to col. 5, line 41, col. 5, line 67 to col. 6, line 29, col. 11, lines 21-57, col. 12, lines 15-25, col. 2, lines 56-65;

“c) provided that said first modification flag is set, propagating said first data record in said source database to said first data record in said target database” at col. 4, line 59 to col. 5, line 41, col. 2, lines 56-65, col. 12, lines 15-25, col. 11, lines 21-57, col. 5, line 67 to col. 6, line 29;

Boothby does not expressly teach “d) provided that said first modification flag is not set comparing a first modification count contained in said first data record in said source database with a second modification count contained in said first data record in said target database, said first and second modification counts each being a value indicating how many times said first data record in said source database and said first data record in said target database has been modified respectively”. However, Scott teaches this limitation at col. 8, line 45 to col. 9, line 49, col. 6, lines 44-61.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Boothby with the teachings of Scott to include step (d) in order to provide methods and systems for synchronizing in which accurate and efficient determination can be made as to whether the record was already updated in the replica database, the databases can thereby be synchronized without requiring transmission or retransmission of the entire database.

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Boothby does not specifically teach “e) provided that said first modification count has a higher value than said second modification count, propagating said first data record in said source database to said first data record in said target database, wherein said steps a) through e) can be completed without comparing raw data of said first data record and said corresponding data record”. However, Scott teaches this limitation at col. 7, line 57 to col. 8, line 9, col. 8, lines 29-63.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Boothby with the teachings of Scott to include step (e) in order to provide methods and systems for synchronizing databases in which accurate and efficient determination can be made as to whether the record was already updated in the replica database, the databases can thereby be synchronized without requiring transmission or retransmission of the entire database.

As to claims 2, 12, 22, Scott teaches “the step f) of incrementing said second modification count to said higher value of said first modification count” at col. 7, line 57 to col. 8, line 63.

As to claims 3, 13, 23, Boothby teaches steps a) through c) at col. 4, line 59 to col. 5, line 41, col. 12, lines 15-65; Scott teaches steps d) through f) at col. 7, line 57 to col. 8, line 63, as indicated hereinabove, and are repeated until all of said data records in said source database have been processed.

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As per claims 5, 15, 25, Boothby teaches “step c) comprises the steps of: clearing said first modification flag” at col. 15, lines 23-34, col. 11, lines 8-57.

As per claims 6, 16, 26, Boothby teaches “step c) comprises the steps of: creating a new data record in said target database according to said first data record in said source database, provided that said first modification flag is set to indicate that said first data record is new in said source database and that said first data record does not exist in said target database” at col. 15, lines 23-34, col. 11, lines 8-57;

“clearing said first modification flag” at col. 15, lines 23-34, col. 11, lines 8-57.

As per claims 7, 17, 27, Boothby teaches “step c) comprises the step of marking said corresponding data record as deleted in said target database, provided that said first modification flag is set to indicate that said first data record has been deleted from said source database and that said corresponding data record exists and is not already marked as deleted in said target database” at col. 8, lines 9-24, col. 12, lines 49-65.

As per claims 8, 18, 28, Boothby teaches “first database and said second database reside in different host systems” at col. 2, line 33 to col. 3, line 58, Abstract.

6. Claims 4, 14, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boothby et al. (US Patent No. 6,044,381), in view of Boothby et al. (US Patent No. 6,532,480).

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As to claims 4, 14, 24, Boothby ('381) does not specifically teach "g) redesignating said second database as said source database and said first database as said target database".

However, Boothby ('480) teaches this limitation at col. 5, lines 31-63.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Boothby ('381) with the teachings of Boothby ('480) to include step "g) redesignating said second database as said source database and said first database as said target database" in order to provide method of synchronizing multiple databases of different Applications.

Step "h)" is rejected under same rationale given above to claim 3, that is, Boothby teaches steps a) through c); Scott teaches steps d) through f) as described herein above, and are repeated until all of said data records in said source database have been processed.

7. Claims 9, 10, 19, 20, 29, 30, are rejected under 35 U.S.C. 103(a) as being unpatentable over Boothby et al. (US Patent No. 6,044,381), in view of Taivalaari et al. (US Patent No. 6,366,898).

As per claims 9, 19, 29, Boothby teaches first database resides in a handheld computer (col. 4, lines 32-40), but does not explicitly teach "first database resides in a personal digital assistant (PDA)". However, Taivalaari teaches this limitation at col. 2, lines 14-29.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Boothby with the teachings of Taivalaari to include in order to

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provide a method of creating and periodically loading a database of classfile on a non traditional computer device, such as a PDA.

As per claims 10, 20, 30, Boothby does not specifically teach “second database resides in a computer system to which a personal digital assistant (PDA) can be coupled via a cradle device”. However, Taivalaari teaches this limitation at col. 6, lines 30-53.

Thus, it would have been obvious to one ordinarily skilled in the art at the time of the invention to combine the teachings of Boothby with the teachings of Taivalaari to include “second database resides in a computer system to which a personal digital assistant (PDA) can be coupled via a cradle device” in order to provide a method of creating and periodically loading a database of classfile on a non traditional computer device, such as a PDA, cellular telephone,..., or other embedded device.

Response to Arguments

8. Applicant's arguments filed 03/22/04 have been fully considered but they are not persuasive.

Applicant argues that:

(a) Boothby does not teach b) determining a state of a first modification flag contained in a first data record in said source database, wherein said first modification flag indicates that said first data record in said source database has been modified and wherein a value of said first modification flag, indicative of a particular event, is set upon an occurrence of said particular event.

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(b) Novak does not teach first modification count is contained in the first data record as claimed in the amended claims 1, 11, 21.

The Examiner respectfully disagrees for the following reasons:

Per (a), with regards to step b) of claims 1, 11, 21 Applicant's arguments are not persuasive. The Examiner has thoroughly reviewed Applicants' arguments, but firmly believes that the cited reference reasonably and properly meets the claimed limitation. Applicants are reminded that the Examiner is entitled to give the broadest reasonable interpretation to the language of the claimed as explained below. The Examiner is not limited to Applicants' definition which is not specifically set forth in the claims. In re Tanaka et al., 193 USPQ 139, (CCPA) 1977.

In regard to step b), Boothby discloses the modification flag (i.e. acknowledgement flag, col. 11, lines 29-32) is contained in a particular record indicating that data record in a source database has been modified (i.e. changed or added (col. 12, lines 49-65). Boothby discloses a value of the data record (i.e. added, changed, deleted), indicative of a particular event (i.e. a record has been added, changed or deleted" (col. 12, lines 49-65).

In addition, since all records received by the host segment from the remote segment are flagged with one of Added, Changed, or Deleted flags" (col. 12, lines 49-52), and "if a record is flagged as an added record, then the received record is added" (col. 12, lines 54-55); it is hence evidence that a modification flag (i.e. added, changed, deleted) is contained in each corresponding record.

It should be noted that in the synchronization process of Boothby, a history file is the history log which contains records representative of the records of the two databases at the end of

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the previous synchronization (col. 6, lines 8-11, and is used as an intermediate database (i.e. copies of the results of the previous synchronization of the synchronized records of the two databases). Alternatively, if no history file from a previous synchronization exists or the user chooses to synchronize without using the history file, the synchronizer does not load the history file.

Per (b), Applicant's arguments regarding Novak does not teach first modification count is contained in the first data record with respect to amended claims 1, 11, 21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

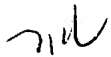
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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (703) 305-3203. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (703) 305-9790. The fax number to this Art Unit is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.



Miranda Le
June 10, 2004



GRETA ROBINSON
PRIMARY EXAMINER